Opening Statemement, Passenger Rail Derailment near Dupont, WA

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Good afternoon and welcome to the Boardroom of the National Transportation Safety Board.

I am Robert Sumwalt, and I'm honored to serve as the Chairman of the NTSB. Joining us are my colleagues on the Board: Vice Chairman Bruce Landsberg, Member Earl Weener, and Member Jennifer Homendy.

Today, we meet in open session, as required by the Government in the Sunshine Act, to consider the derailment of Amtrak passenger train 501 from a highway overpass near DuPont, Washington, on the morning of December 18, 2017.

At about 7:34 a.m., after approaching a 30 mile per hour curve at 78 miles per hour, the train, consisting of 10 passenger railcars, a power railcar, a baggage railcar, and a locomotive at each end, derailed. Some of the rail cars entered Highway I-5 below, hitting several motor vehicles.

Tragically, of the 83 people on the train, 3 passengers died, and 57 passengers and crew members were injured. In addition, eight people in highway vehicles were injured.

On behalf of my colleagues on the Board and the entire NTSB, I would like to offer our sincerest condolences to the families and friends of those who died, and we wish those injured in the accident the fullest possible recovery.

As you know, the goal of NTSB safety investigations is to learn the safety lessons of accidents in order to improve safety and prevent future accidents.

Could this accident have been prevented? The answer is a resounding yes.

Three people did not have to die. Fifty-seven others on board the train, and eight in highway vehicles, did not have to suffer injuries. None of us had to be here today.

At the simplest level, Positive Train Control, or PTC, prevents overspeed derailments, period. The sooner PTC is operational nationwide, the sooner that railroads will operate at greatly reduced risk of overspeed derailment.

Beginning revenue service on the Point Defiance Bypass before PTC was operational set up the engineer to fail.

Today we will once again ask how an engineer could operate a train at high speed (this time, 78 miles per hour) into an area with a much lower speed limit (in this case, a 30 mile per hour curve).

How often have we asked this question, plugging in different numbers and different engineers? They all fail to respond to the steep change in speed, and the reasons for this vary. But there is one common denominator:

Necessary decreases in speed limits going into sharp curves, with insufficient mitigation.

In 2013, when a Metro North train derailed in the Bronx, New York, killing four and injuring at least 61, the train was operating from an 80 mile per hour straight section into a 30 mile per hour curve.

In 2015, when Amtrak Train 188 derailed near Philadelphia, killing 8 and injuring 185, the train was operating from a 110 mph straight section into a 50 mph curve.

There's a recent history of this type of accident, and it extends back decades, as well. And, from these previous accidents, numerous mitigation strategies were mandated … mitigations that that should have been put in place to prevent the DuPont tragedy.

For DuPont, the question becomes, how could a 79 mile per hour speed limit be followed by a 30 mile per hour speed limit at the entrance to the accident curve—without appropriate mitigations?

The Federal Railroad Administration (FRA) and Congress have both acted to identify and mitigate the hazard of substantial drops in speed. Yet, as we will discuss, neither contemplated an ongoing survey to identify such substantial drops in speed. Since the accident curve was new, it was missed by one-time surveys.

We will also discuss the engineer's familiarity with the equipment and territory he was expected to know. The engineer had little experience on the territory, and even less experience on the territory at the controls of the type of locomotive in the accident.

Today we will discuss whether and how such a training gap was permitted to arise, and what measures would be needed to close this training gap.

In this derailment, the engineer did understand that he would have to slow down for a 30 mph curve, but lost track of where he was on the accident territory.

Did signage along the route help him? On a new route especially, signage takes on an increased importance because the engineer isn't familiar with local landmarks that can aid in determining position. Yet the engineer missed the single sign that warned of the upcoming 30-mph curve, 2 miles in advance of the change in speed. Today we will discuss whether additional conspicuous signage might have helped to mitigate risk of overspeed derailment.

Sound Transit was responsible for preparing the track and its associated signals and signage for revenue service, and they performed a preliminary hazard analysis in 2015.

The accident curve was identified, as were three mitigation strategies (in addition to the existing timetable). Two strategies consisted of complying with FRA regulations.

The third—"future PTC"—was not operational when revenue service began.

Yet Sound Transit did not identify additional mitigation measures before certifying the property for revenue service.

On July 10 and 11, 2018, the NTSB conducted an investigative hearing on this accident. This hearing gave investigators and members of this Board the opportunity to understand where the responsibility lay for hazard mitigation.

In this hearing we also discussed the Talgo Series VI Trainset, which was only permitted in service through a grandfathering agreement from FRA. We will discuss whether the items covered by the grandfathering agreement performed adequately. And, we will discuss ways to further enhance occupant protection, even in less vulnerable rolling stock.

After the same accident that resulted in the law mandating PTC installation, the NTSB recommended that the FRA require inward- and outward-facing audio and video recorders in locomotive cabs.

Due to the presence of this equipment, a rich record of the accident trip was available to investigators. It went a long way toward pinpointing actions that were taken and not taken in the cab of the locomotive the day of the derailment. Kudos to Amtrak for installing this equipment, even though it is not yet required.

But no camera can capture the layered interactions of host and tenant railroads with each other, with the FRA, and with other entities such as the state Department of Transportation. These relationships continue to play a part in railroad accidents.

Amtrak continues its progress toward a Safety Management System (SMS), in its ongoing pursuit of safety above and beyond required standards. However, in our investigative hearing, we recognized that Amtrak's safety is largely dependent on host railroad safety. One question is how to implement SMS on Amtrak's host railroads. Part of the answer would be for the FRA to issue its long-delayed regulation, 49 CFR part 270, System Safety Program. We will discuss others.

Staff has pursued all avenues in proposing findings, a probable cause, and recommendations to the Board.

The order of the meeting will be that the NTSB staff will briefly present pertinent facts and analysis found in the draft report. We on the Board will then question staff. We will also propose and vote on any amendments necessary to ensure that the report as adopted truly provides the best opportunity to enhance safety.

The public docket for the accident, and the public docket for our earlier investigative hearing, are both available at www.ntsb.gov. They contain additional information, including photos, postaccident interviews, and exhibits from the hearing. Once finalized, the accident report will also be available on our website.

Now, Deputy Managing Director Paul Sledzik, if you would kindly introduce the staff.